Quality Control

<b>Work Order ID</b> <i>May-13-13 1:04:55 PM</i>	101564		*101	1564*						Page	1
Item ID: D3943 Revision ID: Item Name: Handle E	3 Extension		Accept	*N900	<b>040</b>	100	<b>)*</b> S	Setup Sta	IA	S1* S2*	e Pro-
Start Date: 5/08/13 Required Date: 5/24/13 Reference:	Start Qty: 10.00 Req'd Qty: 10.00	*10* *10*		Cust Item I Customer:	D:		·		IN	. 7 /	
Approvals: Proces	s Plan: <u>別し</u> て	Date:	Tooling: SPC (Y/N):		ate:		F	Run Sta Sto		R1* R2*	
Sequence ID/ Work Center ID	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp	•
Draw Nbr	Revision Nbr									,	<del></del>
D3943	E				•						
*100 *100* Waterjet FLOW CNC Waterjet	Memo 1-Cut as per Dwg Rev:_ Prog Rev:_	E	0.00				10	O		Jmí:	3-5-30
	2-Deburr if t	necessary									
*110 *11 <b>0</b> *	QC2- Inspect parts off m  Memo	achine FAI/FAIB	0.00	·	*		_10_	0		Jma	3/5-30

											DQA:	Date:	
NCR:	res /	No				WORK ORDER NON-	COL	NFORM	MANCE / UP	DATE			.*
											QA Closed:	Date:	
Work Orde	or.					DISPOSITION				AGAINST DE	PARTMENT	/PROCESS	4
Work Orac						Rework	1		Skid-tube	Crosstube	7	Water Jet	Engineering
Part N	No.					Scrap	1		Machining	Small Fab	Pro	d. Eng. Coor.	Quality
	-				<del></del>	Use-as-is	1		noforming	Finishing	4	re/Packaging	Other
NCR I	No					Work Order Update			Large Fab	Composite	]	Supplier	
				,									
Root						ption of work order update	1.	nitial	i	tion	Sign &		
Cause	D	ate	Step	Qty	(	or Non-conformance	Ch	ief Eng	Desc	ription	Date	Verification	QC Inspector
Doc/Data								:					
Equip/Tooling													
Operator													
Material							1				Ī	~	
Setup													
Other				1									
Process													
Supplier	П												
Training													
Unapproved	П												
				•	<del> </del>	F	AUL	T CATE	GORY				
Landi	ng Gear					General							
	Ben	ding				Bend		Grain			Ovalized		Pressure/Forced
	Cer	tre No	t Concer	ntric to	o/s	BOM/Route		Hardwa	re		Over/Under	tolerance	Temperature/Cure
	Cra	cks				Broken/Damaged		Inspecti	on Incomplete		Part Incorred	ct 🗍	Weld
	Cru	shed/0	Crimped			Burrs	$\vdash$	1	ions Incomplete/	Unclear	Part Lost/Mi	ssing	Wrong Stock Pulled

Maintenance

Out of Calibration

Out of Sequence

Outside Dimensions

Mislabeled

Misread

Offset

Contamination

Countersink

Cut Too Short

Drill Holes

Drawing

Finish

Folio

Part Moved

Positioned Wrong

Power Loss/Surge

Other

H:/FORMS/Quality Assurance\approved QA/NCRWO Rev G

Ripples in Bend

Turning Sequence

Wave/Twist in Tube

Cuffs

Heat Treat

Inspection Strip in Tube

Torque Waves in Extrusion

<b>Work Ord</b> <i>May-13-13 1:0</i>		1564	,	*101	1564*						Page 2
Item ID: Revision ID: Item Name:	D3943-3 Handle Exten	sion		Accept	*N900	040	100	<b>)*</b> s	Setup Star	IN	S1* S2*
Start Date: Required Date Reference:	5/08/13	Start Qty: 10.00 Req'd Qty: 10.00	*10* *10*		Cust Item I Customer:	D:		·		IN	5/
Approvals:	Process Pl	an:	Date:	Tooling: _ SPC (Y/N):		ate:		F	Run Star Stop		R1* R2*
Sequence ID/ Work Center I 120 *120* QC Quality Control	D	Operation Description QC8- Inspect parts - seco	nd check	Set Up/ Run Hours 0.00	Tool ID	Tool#	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp  PAS  25/3-8
*130 *130* HAAS I HAAS CNC vertical	al machine #1	<b>Memo</b> MILL AS PE FOLIO REV DWG REV:	ER DWG AND FOLIO FAS	0.00 0.00				<b>/</b> O			<u> 13-6-4</u>

2-MILL DIMPLE USING 3/8" BALL MANUALLY -

140

QC5- Inspect part completeness to step on W/O

0.00

\*14**0**\*

Memo

Quality Control

													DQA:	Da	te:	
NCR: Y	'es	/ No				,	WORK ORDER NON-C	O	NFORI	MANCE / UF	PDATE			_		
													QA Closed:	Da	te:	
Nork Orde	ėr:						DISPOSITION				AGAINS	PARTMENT	/PROCESS			
Part N	OR No				Rework Scrap Use-as-is	Scrap Machining Small Fab Use-as-is Thermoforming Finishing				Prod. Eng. Coor.  Rec/Store/Packaging			Engineering Quality Other			
NCR N	lo.						Work Order Update			Large Fab	Composite	<u> </u>	J 	Supplier	<u></u>	
Root					Desci	ripti	on of work order update		nitial	A	ction		Sign &	<del>.</del>		
Cause		Date	Step	Qty		or	Non-conformance	Ch	ief Eng	Des	cription		Date	Verification	n ·	QC Inspector
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quip/Tooling																
perator																
laterial								ĺ					Ì	-		
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ther										<u>;</u> :						
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upplier																
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Landi	ng (	Gear			_	_	General		•				-			· •
		Bending				_ B	end	Ш	Grain				Ovalized		L	Pressure/Forced
		Centre No	ot Concer	ntric to (	o/s	В	OM/Route	Ш	Hardwa	re			Over/Under	tolerance	L	Temperature/Cure
		Cracks			L	B	roken/Damaged			on Incomplete	5		Part Incorred	ct	L	Weld
		Crushed/0	Crimped		L	∐В	urrs		Instruct	ions Incomplete	/Unclear		Part Lost/Mi	ssing	L	Wrong Stock Pulled
		Cuffs				C	ontamination		Mainte	nance			Part Moved			
		Heat Trea	t			c	ountersink		Mislabe	led			Positioned W	Vrong	_	•
		Inspection	n Strip in	Tube	L	— ∤	ut Too Short		Misread	ł			Power Loss/	Surge		Other
		Ripples in	Bend		L		rill Holes		Offset							
		Torque W	aves in E	xtrusio	n L	_ D	rawing	Ш	Out of (	Calibration						
				Fi	inish		Out of Sequence									

Outside Dimensions

Wave/Twist in Tube

Folio

Work Order ID 101564	Nork	Order	ID	-101	504
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## \*101564\*

Page 3

May-13-13 1:04	4:55 PM				· · · · · · · · · · · · · · · · · · ·							+ ·-
Item ID: Revision ID:	D3943-3			Accept	*N900	<u>040</u>	100	)* ፡	Setup	Start	*N:	S1*
Item Name:	Handle Extens	sion								Stop	*N:	S2*
Start Date:	5/08/13	Start Qty: 10.00	*10*	·	Cust Item I	D:						,
Required Date:	: 5/24/13	<b>Req'd Qty:</b> 10.00	*10*		Customer:							i 1
Reference:								_	_	S4 4		i
Approvals:	Process Pla	n:	Date:	Tooling:	Da	nte:		ļ	Run	Start	*N	R1*
	QC:		Date:	SPC (Y/N):	Da	nte:	<del></del>			Stop	*N	R2*
Sequence ID/ Work Center I	D	Operation Description	1	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Rejo Qty		Reject Number	Insp. i Stamp
170		Identify as per dwg & Sto	ock Location:	<b>(</b> 0.00								- '
*170* Packaging Packaging		Memo	•	0.00				/D		2/	13-6	5
180		QC21- Final Inspection -	Work Order Release	0.00							,	
*120*								MUS	12	, U6.	-01	
QC Quality Control		Memo		0.00				•	•	la Ia	13. dr	,5

									DQA:	Date:	
NCR: Ye	es / No				VORK ORDER NON-C	CONFOR	RMANCE / UF	PDATE	QA Closed:	Date:	
Work Order	r:				DISPOSITION			AGAINST DE	PARTMENT	/PROCESS	
Part No					Rework Scrap Use-as-is Work Order Update	The	Skid-tube  Machining moforming Large Fab	Crosstube Small Fab Finishing Composite	-1	Water Jet d. Eng. Coor. re/Packaging Supplier	Engineering Quality Other
Root				Descriptio	n of work order update	Initial	A	ction	Sign &		<del>= =</del>
Cause	Date	Step	Qty	or N	on-conformance	Chief En	g Des	cription	Date	Verification	QC Inspector
Doc/Data					,						
quip/Tooling											
Operator											
Material											
Setup											
Other											
Process		}									
Supplier											
Fraining											
Jnapproved											
				<del></del>	F	AULT CAT	EGORY				

Part Moved Cuffs Contamination Maintenance Positioned Wrong Countersink Heat Treat Mislabeled Other Inspection Strip in Tube Cut Too Short Misread Power Loss/Surge Ripples in Bend Drill Holes Offset Torque Waves in Extrusion Drawing Out of Calibration Turning Sequence Finish Out of Sequence Folio **Outside Dimensions** Wave/Twist in Tube

Grain

Hardware

Inspection Incomplete

Instructions Incomplete/Unclear

Ovalized

Part Incorrect

Part Lost/Missing

Over/Under tolerance

Pressure/Forced

Weld

Temperature/Cure

Wrong Stock Pulled

General

Bend

Burrs

BOM/Route

Broken/Damaged

**Landing Gear** 

Bending

Cracks

Crushed/Crimped

Centre Not Concentric to O/S

Page 1

Work Order ID:

101564

Parent Item:

D3943-3

Parent Item Name:

Handle Extension

**Start Date:** 5/08/13

Required Date: 5/24/13

**Start Qty: 10.00** 

Required Qty: 10.00

Comments:

Est Rev:A New Issue 09-06-03 JLM Verified By:EC

IPP Rev:B as per dwg REV.C DD

10.02.22 verified by:EC IPP REV:C 11.08.16 AS PER REV.E DD VERF:JLM

	10.02.22 (Cillied	03.80 1111	E 1.6 11.00.10 1191	ER REVIE DI	7 7 21 (1 .5 )							
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Primary Item Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M304B0.500X012.000		Purchased	No		100	f	21.5000	1.26	13.2631	58120	•	7. 3 -
304 BAR .500 X 12.00						•			<del></del>	# 25	<u> </u>	-JW122

 Location
 Loc Oty
 Loc Code

 MAT051
 21.5

 112778
 17.5

 116061
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8FFE1

					•					DQA:	Date	:	
NCR: Ye	es / No				WORK ORDER NON-C	CONFORMANCE / UPDATE  QA Closed: Date:							
						_			······				
Work Order	r:				DISPOSITION		AGAINST DEPARTMENT/PROCESS						
	-				Rework			Skid-tube	Crosstube	]	Water Jet	Engineering	
Part No	o				Scrap			Machining	Small Fab	_	d. Eng. Coor.	Quality	
					Use-as-is			noforming	Finishing	Rec/Sto	re/Packaging	Other	
NCR No	o	<del></del>	· · · · · · · · · · · · · · · · · · ·		Work Order Update	┚┃		Large Fab	Composite		Supplier	J ' [_]	
Root		<u> </u>		Descri	ption of work order update	l ir	nitial	Ac	tion	Sign &			
Cause	Date	Step	Qty		or Non-conformance	1	ief Eng		ription	Date	Verification	QC Inspector	
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upplier	_		1 1										
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Inapproved			1			<u> </u>				· .			
		<del></del>				AUL	T CATE	<b>SORY</b>					
Landin					General		<b>.</b> .			Ja	_	7,,,,,,,	
-	Bending			,,  -	Bend	$\vdash$	Grain		<u> </u>	Ovalized	+=lananaa	Pressure/Forced	
-	Centre N	ot Conce	ntric to C	)/S  -	BOM/Route	$\vdash$	Hardwa			Over/Under	<del></del>	Temperature/Cure Weld	
-	Cracks	·		-	Broken/Damaged	$\vdash$	•	ion Incomplete	Linelaar	<b>⊣</b>	<u> </u>	Wrong Stock Pulled	
-	Crushed/	Crimped		-	Burrs	$\boldsymbol{\vdash}$		ions Incomplete/	Unclear	Part Lost/Mi	issing	Twrong Stock Pulled	
	Cuffs			-	Contamination Countersink	$\vdash$	Mainte Mislabe		-	Positioned V	Vrong		
-	Heat Trea		Tubo	$\vdash$	Cut Too Short	$\vdash$	Misreac		<del> </del>	Power Loss/		Other	
-	Inspectio Ripples in	•	Tube		Drill Holes		Offset	1	L	T. OMEL FOSS	Juige	Other	
-	Torque V		Evtrucion	, <del> </del>	Drawing	$\mathbf{H}$		Calibration			· · · · · · · · · · · · · · · · · · ·	<del>- , , , , ,</del>	
<b>+</b>	Turning S			' ├	Finish`	-		Sequence		· · · · · · · · · · · · · · · · · · ·			
	1	_ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~ ~		1									

Outside Dimensions

Wave/Twist in Tube

Folio

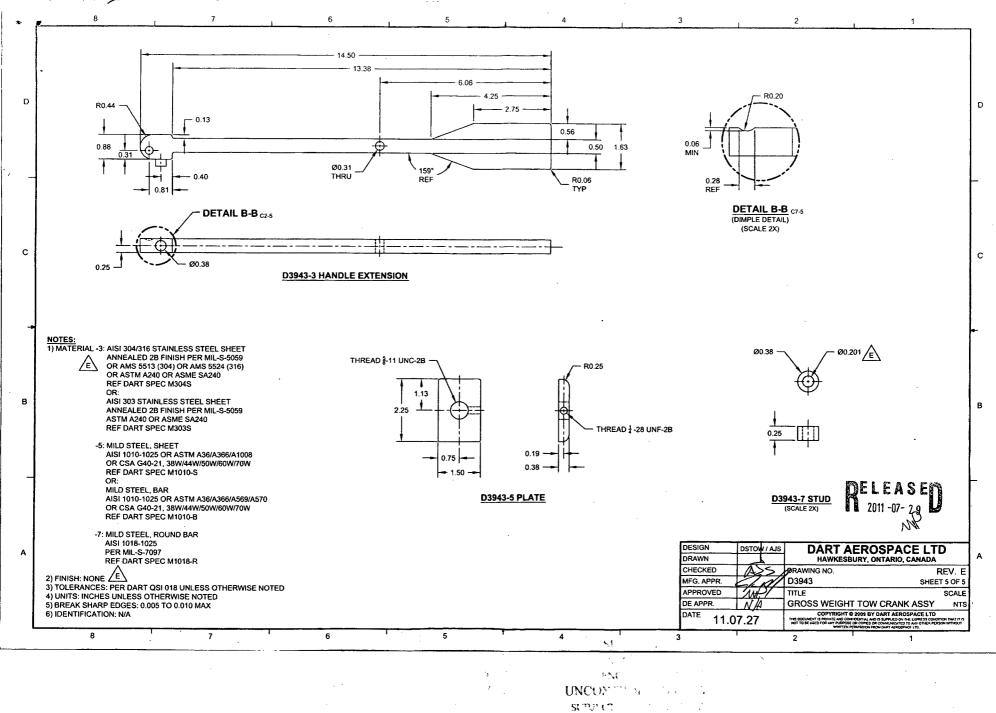
DART AEROSPACE LTD	Work Order:	101564
Description: Handle Extension	Part Number:	D3943-3
Inspection Dwg: D3943 Rev: E		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

Tolerance	Actual	Accent	Pajact	Method of	6
	Dimension	Accept	Reject	Inspection	Comments
+/-0.030	0.874"			1/	Jhmo1
+/-0.030			T		JA.O.
+/-0.030	0.117	<b>-</b>		V	
+0.006/-0.001	0311	-		V	
+/-0.030	1,630	<u></u>			
+/-0.030	0.508"	<u>ب</u>			
+/-0.030	0.553				
+/-0.030		_			
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+/-0.030	(2.055)	レ			
+/-0.030	13.38"	~			Jhmoo
+/-0.030	14.50"	_		1	UNINGO
	·				<u> </u>
	+/-0.030 +/-0.030 +0.006/-0.001 +/-0.030 +/-0.030 +/-0.030 +/-0.030 +/-0.030 +/-0.030	Tolerance  +/-0.030 -/-0.030 -/-0.030 -/-0.030 -/-0.030 -/-0.001 -/-0.030	Tolerance	Tolerance   Dimension	Tolerance   Dimension   Accept   Reject   Inspection

Measured by:	Jm	Audited by:	Preliminary Approval:	
Date:	13-5-30	Date: /3-6-4	Date:	

Rev	Date	Change	Revised by	Approved
Α	09.06.11	New Issue	KJ AA	/ / / / / / / / / / / / / / / / / / /
В	12.02.01	Dimensions update per Dwg Rev E	KJ OST	<del>  Mat  </del>
			77	<del>- 187</del>



UNCON 10 1 SCOVED 10 10 15 6 4 MC5 15 15 15